

L 10641-63

ARG/EPR/ENG(s)-2/EPA(b)/EWT(d)/FCS(k)/EWT(1)/EWT(m)/
FBD/FBO/FCS/HIS/ES(t)-2 AFFTC/ASD/AFMDC/APGC/SSD Ps-4/Pw-4/Pd-4
TT/WW

S/018/63/000/005/001/001

AUTHOR: Labzenkov, V. and Sofronov, Ye.

TITLE: Aerodynamics of antiaircraft rockets

PERIODICAL: Voyenny vestnik. No. 5, 1963, 84 - 86

TEXT: Modern rockets are either winged or ballistic. Antiaircraft rockets are winged. Their speed range is from 2500 - 7000 km/hr, with altitudes primarily from 10 - 30 km. During movement in an air medium, the rocket (missile) is subjected to aerodynamic forces caused by unequal distribution of pressure on the surface of the aircraft. The distribution of pressure, in turn, depends on the distribution of air flow speeds. The components of complete aerodynamic forces are drag and lift. Frictional forces act during the flow of air around the rocket. Moreover, in the great range of subsonic speeds the uninterrupted flow is replaced by the interruption of the stream and the formation of a vortex. The difference in pressure between the nose and tail portions of the rocket leads to a braking of the rocket. Lift is also caused by the pressure difference on the upper and lower surfaces. Lift is caused primarily by wings. Hence, this class of rocket is used at comparatively low altitudes. Ballistic rockets have no wings and are controlled by gas

Card 1/3

L 10641-63

Aerodynamics of ...

S/018/63/000/005/001/001

vanes or special turning engines. Winged rockets are controlled by aerodynamic as well as gas dynamic vanes. The greater the speed, the more the role of air compression, expressed in machs, becomes the main role. The greater the ratio of the speed of current to that of sound, the greater the compressibility of gases. With mach less than 1 air compression is insignificant and resistance is small. With mach greater than 1, continuity of the flow's parameters is disrupted and there is great agitation, leading to the phenomenon of shock waves and pressure bounds. Continuity is disrupted as the gas parameters on one side of the shock wave differ sharply from those on the other side of its front. As a result of the braking of the air flow ahead of the rocket's nose, the temperature of the air and the rocket surface is raised. The optimum rocket shape for subsonic flight is drop-shaped. On supersonic rockets, the rocket nose and leading edge of the wings are sharp and the aerodynamic surfaces thin. The greater the rocket's speed, the longer its nose. The center is cylindrical. With an increase in the angle of the center part, drag increases. The tail part is either a cylinder or a truncated cone. There is no optimum aerodynamic form for all speeds. At subsonic speeds, the wing profile should have a blunt leading edge; with supersonic speeds, sharp. Depending on the locations of the support and control surfaces, the aerodynamic patterns of winged rockets may be: duck-shaped with air vanes ahead of the wings; normal, with air vanes behind the

Card 2/3

L 10641-63

Aerodynamics of ...

S/018/63/000/005/001/001

wings; with tail control, the air vanes coinciding with the supporting surfaces. In the duck-shaped rocket the lift force of the vanes and wings supplement each other and the support surfaces are less. Three figures.

Jeff Allen
Card 3/5

LABZIN, A. A.

21850 LABZIN, A.A. Eksperimental'nyy apparat dlya polucheniya aeronalety.
Trudy Krasnodarsk. in-ta pishch. prom-sti, vyp. 5, 1949, s. 172-76.

30: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

LABZIN, G.A.; KASHKIN, A.S.

Significance of the pH in the inspection of chrome tanning.
Kosh.-obuv.prom. 3 no.2:35-36 P '61. (MIRA 14:4)
(Tanning)

LABZIN, G.A.; SHARONINA, G.G.

Experiment in using chromium hydroxide in leather degreasing.
Kozh.-obuv.prom. 3 no.7:32-34 J1 '61. (MIRA 14:9)
(Leather)

MIKLOS, Anatoliy Georgiyevich; VESHKEL'SKIY, S.A., inzh., retsenzent;
LABZIN, M.D., kand. tekhn. nauk, retsenzent; ALEKSANDROV,
A.D., nauchn. red.; SMIRNOV, Yu.I., red.

[Automatic control and control and measuring apparatus of
marine power plants] Avtomatika i kontrol'no-izmeritel'nye
pribory sudovykh silovykh ustanovok. Leningrad, Sudostroenie,
1965. 138 p.
(MIRA 18:8)

22733

S/119/61/000/004/003/005
B104/B205

6.7800
AUTHORS:

Baranov, R. A., Engineer, and Labzin, N. N., Engineer

TITLE:

Contactless small-size remote signaling device of type
YTC-3 (UTS-3)

PERIODICAL: Priborostroyeniye, no. 4, 1961, 18-20

TEXT: The TsLEM Mosenergo (Central Laboratory and Experimental Workshop of Electrical Measurements and Instruments of the Moscow Regional Power System) has developed a remote signaling device, the basic units of which operate with contactless components. The new device was designed in cooperation with Engineer M. R. Fishkin. It uses several communication channels and operates on the principle of pulse indication with respect to time. The output data are obtained as a continuous series of pulses of different width and spacing. The series has the following time parameters for various signals:

Number of signal	Pulse	Duration, msec	Spacing
1	110	25	110
2	25	110	25
3	25	25	25

Card 1/6

Contactless small-size remote...

22733

S/119/61/000/004/003/005
B104/B205

The device consists of a pulse generator, an amplifier, a transmission line, and a dispatcher. The dispatcher includes a unit for pulse reception, a decipherer, and a signal-fixing unit. The first two units are schematically shown in Fig. 3. The pulse generator consists of the two transistors T_1 and T_2 and the amplifier of the two transistors T_3 and T_4 . In the absence of signals at the control point to the generator, the supply of the pulse generator is interrupted. Pulses of varying duration are produced by three relays, $P_1 - P_3$, the frequency of which is proportional to the voltage applied. The shape of the pulses is shown in Fig. 1. The dispatcher is schematically shown in Fig. 4. The pulse-reception unit consists of a linear relay, J , and a linear transformer, Tp_1 , and decipherer unit is a flip-flop circuit which may occupy any position in the absence of a signal. The position of the trigger is changed by the passage of signals; during the duration of one pulse the transistor T_2 is open, and during an interval, the transistor T_1 . The time for which the trigger is in one or the other position is determined by the duration of the pulse or

Card 2/6

Contactless small-size remote...

22733
S/119/61/000/004/003/005
B104/B205

the interval. The alternating conduction of the trigger branches is used to control the signal-fixing unit. The transistors T_4 and T_5 controlled in this manner feed the coils of the relays $P_1 - P_3$. One of the three relays is operated, depending on the type of pulse (Fig. 1). This is achieved by a proper choice of the parameters of the chokes $\Delta p_1 - \Delta p_4$, which are adapted to the parameters of the relay coils. There are 5 figures and 1 table.

Card 3/6

LABZIN, N.N., BARANOV, R.A., inzh.

Contactless TMT-1 remote control and signaling devices. Elek.
sta. 34 no.8:58-60 Ag '63.
(MIRA 16:11)

L 12941-65

ACCESSION NR: AP4048499

8/0119/64/000/008/0011/0013

AUTHOR: Baranov, R. A.; Labzin, N. N.

TITLE Multivibrator for telecontrol devices

SOURCE: Priborostroyeniye, no. 8, 1964, 11-13

TOPIC TAGS: telesignalization device, controlled pulse generator, junction transistor multivibrator

ABSTRACT: In the Central Laboratories and Experimental Workshops (TsLEM) of the Moscow Rayon Administration of the Power Economy (Mosenergo), telesignalization devices (UTS-3, TMT-1) with a controlled pulse generator were developed. During development of the controlled generator, the laboratory used a junction transistor multivibrator (circuit shown in figure 1). The article shows why this multivibrator could not be used satisfactorily as a controlled pulse generator, and describes the circuit of a successful new multivibrator (figure 2). The circuit of the new multivibrator is employed in a Type TMT-1 telesignalization device which is produced by the TsLEM of Mosenergo. There are two figures; the bibliography contains six Soviet items.

Card 1/2

1: 12941-65

ACCESSION NR: AP4048499

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 006

ENCL: 00

OTHER: 000

SUB CODE: 10

JPRS

Card 2/2

LABZIN, N.N.; BARANOV, R.A.

Flashing light signal for dispatcher stations. Biul.tekh.-ekon.in-
form.Gos.nauch.--issl.inst.nauch.i tekh.inform. 17 no.1:87-88 '64.
(MIRA 17:2)

L 56196-65

ACCESSION NR: AP5017805

UR/0286/65/000/011/0039/0040
621,373.52

AUTHOR: Labzin, N. N.; Baranov, R. A.; Gorinshteyn, L. L.

TITLE: A multivibrator. Class 21, No. 171433

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 39-40

TOPIC TAGS: relaxation oscillator, transistorized circuit

ABSTRACT: This Author's Certificate introduces a multivibrator based on two capacitance-coupled transistors. Operational stability is maintained during oscillations in the supply voltage by connecting semiconductor diodes in the forward direction in the collector circuits of the transistors in series with the load.

ASSOCIATION: none

SUBMITTED: 08Dec62

ENCL: 01

SUB CODE: EC

NO REC 80V 000

OTHER 000

Card 1/2

1. 56490-65

ACCESSION NR: AP5017805

ENCLOSURE: 01

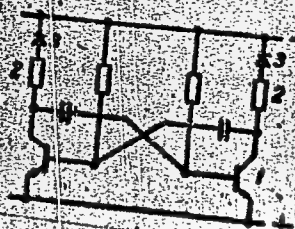


Fig. 1. 1--transistors; 2--load;
3--semiconductor diodes

SOV/126-6-5-33/43

AUTHORS: Labzin, V.A. and Bazhenov, V.V.

TITLE: —Growing of Monocrystals of Low Melting Point Metals
(O vyrashchivanií monokristallov legkoplavkikh metallov)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6,
Nr 5, pp 941 - 942 (USSR)

ABSTRACT: The method of zone crystallisation, suggested by V.I. Likhtman and B.M. Maslennikov for growing of monocrystals of low melting point metals (Ref 1), produces a definite distribution of monocrystals according to the orientation of the acting slip elements which are characterised by a preferential orientation (the maximum on the distribution curve) which depends on the speed at which the furnace is moved and the closer to the optimum ($\chi = 45^\circ$), the lower is the speed. This relationship is particularly clearly evident in monocrystals of the hexagonal system (Zn, Cd, Mg), which possess only one slip plane, the base plane of the hexagonal prism. In Figure 1 a diagram of the distribution of zinc monocrystals according to the angle of inclination of the base plane to the axis of the specimens, at a furnace movement speed of approximately 2 mm/min, is shown. Under these conditions the preferential orientation

Card1/4

SOV/126-6-5-33/43

Growing of Monocrystals of Low Melting Point Metals

was found to be in the range of $5 - 15^{\circ}$.

We have worked out a simple method for obtaining monocrystals with a given preferential orientation at any furnace movement rate, which is based on the zone crystallisation method. The proposed apparatus for growing monocrystals of low melting point metals consists of an electric furnace, the spiral of which has the shape of a rectangle. Its long side is 50 mm and its short side, 8 mm. The furnace is fixed to a movable wagon which can be set in motion by a motor, with a sufficiently low speed. A steel plate, 30 mm wide, 250 mm long and 1.5 mm thick, is placed in the aperture of the furnace and is fixed to a rigid support. A polycrystalline low melting point metal wire, bent to a definite angle, is placed on the steel plate. The essence of the method suggested by us is the bend of the polycrystalline wire. Experience has shown that the orientation of the elements of slip, arising during the crystallisation process, remains unaltered relative to the initial axis of the wire, also in those cases when the direction of the wire changes. Hence, by bending the wire through a definite angle, we change the inclination of

Card2/4

SOV/126-6-5-33/43

Growing of Monocrystals of Low Melting Point Metals

the active slip elements to the specimen axis in the bent portion of the wire to that angle. In Figure 2, a diagram of the distribution of monocrystals of zinc according to the angle of inclination of the base plane to the axis of the bent portion of the wire (at an angle of 45°), at a furnace movement rate of approximately 2 mm/min is shown (the same conditions as for an unbent wire, Figure 1). From this diagram it can be seen that the preferential orientation of the base plane in the bent portion of the wire changes with change in direction of the latter.

It should be noted that owing to the conditions of heat removal from the crystallising metal it is necessary to make the plate from low-carbon steel. A copper plate will not produce monocrystals. In order to avoid crack formation during bending of the polycrystalline zinc wire it should be bent on a mandrel pre-heated to approximately 250°C . There are 2 figures and 1 Soviet reference. This is a full translation, with the exception of two figures.

Card 3/4

Growing of Monocrystals of Low Melting Point Metals ^{SOV/126-6-5-33/43}

ASSOCIATION: Saratovskiy pedagogicheskiy institut
(Saratov Pedagogic Institute)

SUBMITTED: May 10, 1957

Card 4/4

24(2)

AUTHORS:

Labzin, V. A., Likhtman, V. I.

SOV/20-121-3-13/47

TITLE:

The Creep of Single Crystals of Zinc in Easily Fusible
Metallic Melts (Polzuchest' ~~na~~ monokristallov tsinka v legko-
plavkikh metallicheskikh rasplavakh)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 3,
pp 443 - 445 (USSR)

ABSTRACT:

According to the results of previous papers, creep velocity is noticeably increased by the absorption of molecules with lower surface tension which are contained in the surrounding medium. Therefore it is interesting to investigate the creep of metallic monocrystals in media with a much lower surface tension (for example, in easily melting metals). Tin and lead, and also alloys of these metals (mixed in various relations) were used as media with lower surface tension. The zinc monocrystals were electrolytically coated by the easily melting metal. The creep of the monocrystalline zinc wires (with and without metallic coating, with lower surface tension) was

Card 1/2

The Creep of Single Crystals of Zinc in Easily Fusible
Metallic Melts

SOV/20-121-3-13/47

investigated within the temperature range between room temperature and 350-400°. At low temperatures (up to melting of the surface coatings), the surface coatings noticeably reduce the velocity of the steady creep. In the presence of a tin coating, a noticeable increase by 15 times its amount of the velocity of the steady creep of zinc monocrystals begins at 250°. The coating of zinc monocrystals by thin lead films reduces the velocity of the steady creep at any temperature. The above mentioned and also other results of this paper agree fully with results of previous papers. There are 2 figures, 2 tables, and 6 references, 6 of which are Soviet.

ASSOCIATION: Saratovskiy pedagogicheskiy institut (Saratov Pedagogic Institute) Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, AS USSR)

PRESENTED:

March 31, by P.A.Rebinder, Academician

SUBMITTED:

March 5, 1958

Card 2/2

LABZIN, V. A., Cand Phys-Math Sci -- (diss) "Research into creep in single crystals of zinc and its influence on the fine coatings of liquid easily fusible metals." Saratov, 1960. 18 pp; (Inst of Physical Chemistry of the Academy of Sciences USSR, Moscow); 185 copies; price not given; (KL, 28-60, 157)

26564

S/126/61/012/002/014/019
E073/E335

189500

AUTHORS: Bazhenov, V.V. and Labzin, V.A.

TITLE: Growing of Single Crystals of Zinc and of Zinc-tin Alloy with a Given Orientation of the Basal Plane

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol. 12, No. 2, pp. 289 - 290

TEXT: The aim of the described work was to study the conditions which permit growing single crystals of pure metals and alloys with a given orientation of the basal plane. Zinc was used as a base alloy and tin as an alloying metal. The single crystals were grown by means of a method of zonal crystallisation, using equipment described by the authors in an earlier paper (Ref. 4 - FMM, 1958, 6, No. 5). In order to grow zinc crystals, polycrystalline zinc wire, 1 mm in dia. and 200 mm long, was placed onto a heated plate above the apparatus and one-third of its length recrystallised (into a single crystal). To determine the location of the basal plane of the single-crystal part of the wire, its end (20-30 mm) was intensively rubbed with cotton wool, wetted with a

Card 1/5

X

26564

S/126/61/012/002/014/019

E073/E335

Growth of Single Crystals

10% HNO_3 solution, washed with water, slightly deformed and loaded for a few seconds in a saturated solution of mercury protonitrate. This treatment enabled tearing the single-crystal part along the basal plane and determining its position. Following that, the single-crystal end of the wire, 30 - 35 mm long, was bent in such a way that the direction of the basal plane should be at the desired angle relative to the axis. The bent wire was placed on a plate of the same experimental set-up in such a way that initially, prior to bending, the furnace should be located above the single-crystal part so that further recrystallisation should take place. The thus-produced single crystals had the desired direction of the basal plane and they could be used for growing longer single crystals, maintaining the same orientation of the basal plane. To fuse the single-crystal germinations with the polycrystalline wire, their ends were immersed for 1 sec into a weak HCl solution, placed in a glass tube of a diameter approximately equalling that of the wire and heated by the flame of an alcohol burner. The
Card 2/5

Growth of Single Crystals ²⁶⁵⁶⁴

S/126/61/012/002/014/019
E073/E335

zinc chloride formed on the surface was then carefully washed with water. It was found that in the experiments relating to the growing of single Zn-Sn alloy crystals ordinary extrusion of the heated metals through a calibrated hole would not yield a Zn-Sn alloy wire of the desired concentration and a smooth surface. However, it proved possible to obtain such single crystals from tin-coated zinc wire. The zinc wire was submerged in a ~~stannous~~ sulphate electrolyte produced by electrolytic dissolution of tin. For obtaining specimens containing less than 0.5% Sn, the tin coating of the zinc wire was effected without passage of current through the electrolyte. ^{obtaining} But current was passed through the electrolyte for higher concentrations. The tin-coated zinc wire was submerged in a solution of silicate glue (25% dry substance), drawn at a speed of 2 mm/min and dried for 3-4 hours at 80 - 110 °C in order to obtain a hard protective film. If specimens were recrystallised without a protective film, their surfaces were rough and covered with a non-uniform oxide film, ^{and} the shape of the specimens differed greatly from the cylindrical. The protective film was washed

Card 3/5

26564

S/126/61/012/002/014/019

E073/E335

Growth of Single Crystals

away with a solution of 1 g NaOH per litre of water after recrystallisation. A layered structure was detected after etching the recrystallised specimens; the layers were parallel to the zinc basal plane. With increasing concentration of tin in the zinc, the tin layers were increasingly pronounced and more frequent (up to 8 layers per 1 mm). One of the important disadvantages of single crystals produced by this method was that in most cases the tin concentration at the end of the specimen was higher. A further disadvantage was the almost parallel orientation of the basal plane of the zinc and the tin layers relative to the axis of the specimen. Producing Zn-Sn single crystals with orientation of the basal plane of $35 - 55^\circ$ relative to the axis of the specimen proved a very difficult problem. In conclusion it is stated that single Zn-Sn crystals with a desired orientation of the basal plane can be obtained as follows: polycrystalline zinc wire coated with tin and a protective layer ^{was} recrystallised from one end throughout the entire length and then, in a second operation, in the opposite direction. After this, the end of the specimen

Card 4/5

26564
Growth of Single Crystals

S/126/61/012/002/014/019
E073/E335

which started from the first recrystallisation was freed of the protective layer and etched for determining the orientation of the basal plane. Following that, the specimen was bent to such an angle that the basal plane of the bent short section should form an angle of 45° with the main part of the specimen and then it was again recrystallised. Such treble crystallisation enabled obtaining single crystals of Zn-Sn with a basal-plane angle of the basic zinc metal approaching 45° with an approximately uniform concentration of tin along the specimen. If the recrystallisation conditions are appropriately chosen, the yield reaches 30%. [Note: slightly abridged translation.] There are 7 Soviet references.

ASSOCIATION: Saratovskiy gosudarstvennyy pedagogicheskiy institut (Saratov State Pedagogical Institute)

SUBMITTED: January 27, 1961

Card 5/5

1. LABZIN, V.G.
2. USSR (600)
4. Afforestation
7. Carry out spring silviculture work in an exemplary manner, Les.khoz. 6 no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953. Unclassified.

LABZIN, V. P.
LABZIN, V.P.

Some achievements of the drug industry in the U.S.S.R. during the
past 40 years. Apt.delo 6 no.5:15-19 S-O '57. (MIRA 10:11)
(DRUG INDUSTRY--HISTORY)

LABZIN, V. P.

LABZIN, V.P.; SELIVANOV, A.I.

Methods for increasing the production of glass ampules. Med. prom.
11 no.3:36-39 Mr '57 (MLRA 10:4)

1. Glavnoye upravleniye khimiko-farmatsevticheskoy
promyshlennosti.
(GLASS MANUFACTURE)

LABZINA, Aida Alekseyevna; OZEROV, V.S., red.; PRESNOVA, V.A., tekhn.
red.

[Creative alliance of science and labor] Tvorcheskii soiuz
nauki i truda. Leningrad, Lenizdat, 1961. 56 p.
(MIRA 15:10)

(Leningrad---Technological innovations)
(Leningrad---Industrial management)

LABZINA, L.D.

KAMENSKIY, I.N.; LABZINA, L.D.

Purifying benzylpenicillinum potassium salt by recrystallization.
Med.prom. 11 no.4:31-34 Ap '57. (MLA 10:6)

1. Moskovskiy zavod meditsinskikh preparatov No.1.
(PENICILLUM)

L 5304-66 EWT(1)/EWA(j)/EWT(m)/EWA(b)-2 JK/AM

ACC NR: AP5025007

SOURCE CODE: UR/0286/65/000/016/0067/0067

AUTHORS: Platonova, T. F.; Kuzovkov, A. D.; Khryashcheva, K. M.; Labzina, L. D.

ORG: none

TITLE: A method for purifying tetracycline. Class 30, No. 173888 [announced by the All-Union Scientific Research Institute of Antibiotics (Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 67

TOPIC TAGS: antibiotic, tetracycline, epitetracycline, calcium chloride

ABSTRACT: This Author Certificate presents a method for purifying tetracycline. To remove epitetracycline and other organic admixtures, the solution of the antibiotic is treated with a calcium salt such as calcium chloride at pH of 3.1-3.4, and the resulting compound is washed with water at pH of about 3.0.

SUB CODE: GC, LS / SUBM DATE: 28Oct64 / ORIG REF: 000 / OTH REF: 000

Card 1/1

UDC: 615.45.779.931

09010543

LABZINA, L. V.,

"Problem of Vaccinating Chickens Against Variola and the Atypical Form of Fowl
Plague (Practical Veterinary Medicine---No. 8, 1960, German Democratic Republic
(DDR) W. Seffner. An Abstract."
Veterinariya vol. 38., no. 11., November 1961., p. 87

LABZINA, L. V.,

"Study of Sheep Abortion Caused by a Virus*, in Particular the Diagnostic Accuracy of Complement Fixation Reaction(RSK) (Berlin and Munich, Veterinary Weekly, no. 73, (15) 1960) W. Seffner. An Abstract.

*Psittacose Lymphogranuloma
Veterinariya vol. 38., no. 11., November 1961., p. 86

SUNTSEVA, T.S.; DOROFYEV, K.A., prof.; BEZUGLOV, G.M.; LABZINA, L.V.

Veterinary science abroad. Veterinariia 38 no.11:82-88 N '61
(MIRA 18:1)

LABZINA, N. G.

(6)
Radiolimitic Effect of the Oxidation Products of Unsaturated Fatty
Acids in Various Biological Systems and Objects

Yu. B. Kudryashov, G. I. Gavanov, E. N. Goncharenko,
S. P. Korolev, N. G. Labzina, B. A. Lomsadze,
Lyu Khao-tu, Syue Yui-khua and O. F. Filenko

Oxidation products of oleic acid acted *in vitro* on enzyme systems responsible for the decomposition of proteins in tissues. They inhibited the autolysis reaction. Unoxidised or weakly oxidised fatty acid increased autolysis. Ionizing radiation influences autolysis, depending on the method of irradiation, dose, and time after irradiation. It was shown that the disturbance of the autolytic decomposition of proteins in irradiated animals occurs as an indirect mechanism apparently due to toxic substances of the type of oxidised oleic acid. Peroxides of unsaturated fatty acids have some haemolytic properties. Radio-protective compounds, i.e. β -mercaptoethylamine, amino-

ethylisothiourea, cysteine and others also reduce the haemolytic properties of the oxidation products of oleic acid. The effect of oxidation products of oleic acid on haploid and diploid yeast cells is similar to that of X-rays as judged by cell survival, formation of micro- and macro-colonies, and their form. Anoxia reduces the sensitivity of haploid cells to oxidized oleic acid. The oxygen effect is smaller than that for ionizing radiation. This suggests that the primary mechanism of radiation injury involves at least two consecutive oxidation reactions. Similar results were found in mice, rats and rabbits. The following parameters were investigated: survival, blood picture, physico-chemical properties of erythrocytes, time of coagulation and the thromboplastic activity of blood, activity of liver cathepsins, permeability of histo-haematic barriers (liver, brain, skeletal muscles), appearance of micro-necroses in bone/marrow. The results suggest that oxidation products of unsaturated fatty acids, the peroxides, aldehydes and ketones (perhaps also radicals of these products) are radiomimetic. Since the substances examined may appear in organs and tissues of irradiated animals, they are particularly interesting in comparison with known radiomimetics.

Moscow State University, USSR

report presented at the 2nd Intl. Congress of Radiation Research,
Harrogate/Yorkshire, Gt. Brit. 7-11 Aug 1962

L 14159-66 EWT(m)

ACC NR: AP6001313

SOURCE CODE: UR/0248/65/000/009/0026/0032

AUTHOR: Tsarapkin, L. S.; Poryadkova, N. A.; Labzina, N. G.; Alekseyeva, S. I.; Pyatenko, V. S. ⁴³_B

ORG: Institute of Medical Radiology, AMN SSSR, Obninsk (Institut meditsinskoy radiologii AMN SSSR)

TITLE: A study of the processes of cell restoration after primary ¹⁹cytogenetic injuries

SOURCE: AMN SSSR. Vestnik, ²⁰no. 9, 1965, 26-32

TOPIC TAGS: radiation damage, cytology, ionizing radiation, radioprotective agent, mitosis

ABSTRACT: Irradiation induces potential injuries in chromosomes that are capable of restoration. Irreparable injuries take place at the time of chromosome reduplication. The nature--conservative (impaired) or semiconservative (normal)--of the chromosome aberrations varies with the type of fracture undergone by the chromatids in reduplication of the chromosomes. The type of chromosomes formed after redupli-

UDC: 612.014.482.4 : [612.014.24 : 612.6.03

Card 1/2

L 14159-66

ACC NR: AP6001313

cation depends on a number of conditions, e. g., the irradiation dose. The conservative type of chromosome formation is a reversible phenomenon and the transition to the normal, semiconservative type occurs mainly during the first mitosis after irradiation. The results of tests of five groups of chemical compounds for their radioprotective or radiosensitizing effect on pea seeds and shoots are briefly described and tabulated. Most of the agents were able to accelerate or inhibit the spontaneous processes of cell restoration when used after irradiation. The authors also tested the effect of various concentrations of oxidized oleic acid on unirradiated and irradiated cells of Ehrlich's ascites carcinoma. In unirradiated cells, an increase in the concentration of the acid up to a certain point, increased the number of cells with chromosome aberrations. Irradiated cells also exhibited a relationship between the effect and the concentration of the acid. Orig. art. has: 2 figures, 3 tables.

SUB CODE: 06/

SUBM DATE: 05Jun65/

ORIG REF: 004/

OTH REF: 013

Card 2/2 *to*

VLADIMIRSKIY, K.V.; LABZOV, B.A.

Observation of the nuclear magnetic resonance in an unstable
field. Prib. i tekhn. eksp. 6 no.4:53-61 J1-Ag '61. (MIRA 14:9)

1. Fizicheskiy institut AN SSSR.
(Nuclear magnetic resonance)

24.5500

37799
S/120/62/000/002/024/047
E039/E435

AUTHORS: Vladimirskiy, K.V., Labzov, B.A.

TITLE: A spectrometer stabilized by a spin generator

PERIODICAL: Pribery i tekhnika eksperimenta, no.2, 1962, 103-106

TEXT: A nuclear magnetic resonance spectrometer is described in which the resonance condition is stabilized by self excited electron circuits with a spin generator, the frequency of oscillation of which is determined by one of the lines in the investigated sample. The extremely small width of these lines significantly increases the accuracy of the measurements by comparison with the usual type of spectrometer in which the field and frequency are independently stabilized and long term stability is not attained. The resonance circuit is weakly coupled to a quartz stabilized high-frequency generator and the constant field H_0 is modulated by special coils in such a way that the resonant frequency of the auxiliary line of the sample is 2 to 3 Kc/s higher than the frequency of the quartz generator. The generator frequency is determined by the condition for nuclear magnetic resonance in the modulated field

Card 1/2

Ca

CIA-RDP86-00513R000928410011

VLADIMIRSKIY, K.V.; LABZOV, B.A.

Spectrometer stabilized by a spin generator. Prib. i tekhn. eksp.
7 no.2:103-106 Mr-Ap '62. (MIRA 15:5)

1. Fizicheskiy institut AN SSSR.
(Spectrometer) (Nuclear magnetic resonance and relaxation)

VLADIMIRSKIY, K.V.; ZUYEVA, G.Ya.; LABZOV, B.A.

Chemical shift in nuclear magnetic resonance spectra of tetra-
methylgermane and tetramethylsilane. Opt. i spektr. 7 no.4:
522-523 Ap '62. (MIRA 15:5)
(Nuclear magnetic resonance and relaxation)
(Germane—Spectra) (Silane—Spectra)

LABZOV, M.A.

Work practices of public offices of technical information at
enterprises in Vitebsk. NTI no.3:7-8 '64.

(MIRA 17:9)

STROGANOV, A.S. (Moskva); LABEYOV, Yu.V. (Moskva)

Creep and viscoplastic flow of frozen soils under three-axial compression.
Inzh.zhur. 4 no.3:584-589 '64. (MIRA 17:10)

Labzovskiy, L. N.

52087

8/254/60/600/001/001/021
B920/8064

5.4600

AUTHORS: Veselov, M. G., Labzovskiy, L. N.

TITLE: Calculation of Polarizability of a Negative Hydrogen Ion

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, No. 3, pp. 5-6

TEXT: A whole number of electrical, optical, and chemical properties of atomic systems are determined to a high degree by their polarizability and, therefore, a large number of papers deal with the quantum-mechanical calculation of polarizability of atoms and molecules. The polarizability of the negative hydrogen ion was calculated theoretically because no experimental data whatsoever were available on this subject. Some approximation calculations of polarizability of the negative hydrogen ion have been made already in various modifications by some authors (Refs. 1,2). In the present paper, the results are determined more precisely. In the existing quantum-mechanical methods of calculating the polarizability of electrons of atomic systems, the perturbation theory

Card 1/3

Calculation of Polarizability of a
Negative Hydrogen Ion

S/054/60/000/003/001/021
B020/B067

82087

was used sometimes in combination with the variation method. For the correction E_2 to the energy, the variational principle

$E_2 = 2 \int \Psi_0^2 \left\{ (V - E_1) \varphi + \frac{1}{4} (\nabla \varphi)^2 \right\} d\tau = \min (1)$; can be formulated in second perturbation-theoretical approximation. The polarizability in the field direction is expressed by equation (2) $E_2 = -\alpha E^2/2$. The results of

calculation depend on the choice of the trial function φ and the accuracy of determination of Ψ_0 (non-perturbed wave function of the system). For calculating the polarizability, which, as is known, gives the volume of the system and, therefore, depends to a considerable degree on the decrease of Ψ_0 at large distances from the nucleus, a proper consideration of the asymptotic behavior of Ψ_0 is of special importance. In calculating the polarizability, equation (6) gives a more accurate solution than equation (5). The authors calculated the polarizability of the negative hydrogen ion with the aid of the variational method and by using equations (4) and (6), where equation (7) was assumed for P_n , and $\alpha = 1.074$, $\beta = 0.478$, and $c = 0.312$ were obtained for the variable

Card 2/3

Calculation of Polarizability of a
Negative Hydrogen Ion

82037

S/054/60/000/003/001/021
B020/B067

parameters. The values calculated in earlier papers are compared with those obtained by the authors (Table). On the basis of the results obtained by the authors, the values for the energy of electron affinity and for the polarizability ($\alpha = 21.5 \cdot 10^{-24} \text{ cm}^3$) were obtained. The authors assume the latter to be the most reliable for the polarizability of the negative hydrogen ion. There are 1 table and 5 references:
2 Soviet, 2 US, and 1 French.

44

Card 3/3

VESELOV, M.G.; LAZOVSKIY, L.N.

Calculation of the polarizability of a negative hydrogen ion. Vest.
IGU 15 no.16:5-6 '60. (MIRA 13:8)

(Hydrogen)

S/054/62/000/003/001/010
B102/B186

AUTHORS: Veselov, M. G., Labzovskiy, L. N.
TITLE: Consideration of the exchange in the adiabatic approximation
in atomic theory
PERIODICAL: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii,
no. 3, 1962, 30-35.

TEXT: Adiabatic approximation was used to study the influence of core polarization due to the optical electron, by way of calculations analogous to those described in previous papers (Veselov, Bersuker. Vestnik LGU, no. 16, 55, 1957; Izv. AN SSSR. ser. fiz., 22, 662, 1958), in which the exchange interaction between the optical electron and the core electrons are considered. The total wave function in adiabatic approximation $\Psi = \Psi_k = \Psi(q_k) \Phi(q_1 \dots q_k)$ of a univalent atom with $2p+1$ electrons is replaced by a wave function of definite symmetry properties reflecting the exchange effects: $\Psi = \sum_{k=1}^{p+1} (-1)^{k+1} \Psi_k$ so that

Card 1/3

S/054/62/000/003/001/010
B102/B186

Consideration of the exchange ...

$$\sum_{k=1}^{p+1} (-1)^{k+1} \Psi_k = \sum_{l=1}^{p+1} \sum_{k=1}^{p+1} (-1)^{k+1} (\Psi_k)_{q_l=q_{2p+1}} \quad (3).$$

Here $\Psi(q_k)$ describes the optical electron, $\Phi(q_1 \dots q_k)$ the core electrons, $q_1 \leftrightarrow q_{2p+1}$ means that q_1 and q_{2p+1} are exchanged in Ψ_k .

As in the previous papers, the total wave function is calculated in two stages: firstly for the wave function of the core with the optical electron in fixed position is calculated, for the wave function of the optical electron. The result is a generalization of the relations obtained in the previous papers. The exchange correction to the atomic energy ($E = E_0 + E_{ex}$) is given in approximation by

$$E_{ex} = \frac{\rho \int \Psi_0(r_1) [R(r_1, r_2) - E_0 S(r_1, r_2)] \Psi_0(r_2) dr_1 dr_2}{\int \Psi_0(r_1) \Psi_0(r_1) dr_1 + \rho \int \Psi_0(r_1) S(r_1, r_2) \Psi_0(r_2) dr_1 dr_2} \quad (27);$$

and is calculated for the lithium ground state leading to $E_{ex} = -0.023$ at.un. This value comes close to the difference between the values found by the methods of Fok and Hartree respectively:

Card 2/3

VESELOV, M.G.; LABZOVSKIY, L.N.

Allowing for mutual exchange in adiabatic approximations in
atomic theory. Vest. LGU 17 no.16:30-35 '62. (MIRA 15:9)
(Atomic theory) (Electrons)

LABZOVSKIY, L.N.

Pair correlations of electrons in the theory of many-electron systems. Part 1. Vest. LGU. 18 no.16:12-21 '63.

Variational calculation of the correlation energy of a many-electron system. Vest. LGU. 18 no.16:127-130 '63. (MIRA 16:11)

ACCESSION NR: AT4041495

S/2910/63/003/01-/0035/0040

AUTHOR: Veselov, M. G., Labzovskiy, L. N.

TITLE: Adiabatic approximation with exchange in the atomic theory

SOURCE: AN LitSSR. Litovskiy fizicheskiy sbornik, v. 3, no. 1-2, 1963, 35-40.

TOPIC TAGS: atomic theory, quantum mechanics, lithium atom, adiabatic approximation, core electron, valence electron, electron spin, Pauli exclusion principle, electron motion, optical electron, wave function, spin function, Fock equation

ABSTRACT: This is a continuation of the authors' previous work in adiabatic approximation (Vestnik LGU, No. 16, 55, 1957 and Izv. AN SSSR, ser. fiz. 22, 662, 1958), in which the polarization effect between the core electrons and the outer electron (optical electron) and its effect on the motion of the outer electron was considered. The present article extends this theory to a monovalent atom in which the exchange between the core electrons and the optical electron is taken into account. The atomic wave function is written as a product of the outer electron wave function and the wave function of the core which is parametrically dependent upon the position of the outer electron. The total number of electrons is assumed to be $2p + 1$ and is divided into 2 clusters according to the spin direction ($1, 2, \dots, p + 1$ and $p + 2, \dots, 2p + 1$). The linear combination of these atomic wave functions is an

Card 1/2

LABZOVSKIY, L.N.

Fock's functionals used in the theory of many-electron
systems. Teoret. i eksper. khim. 1 no. 5:574-587 S-0 '65
(MIRA 19:1)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo uni-
versiteta. Submitted June 26, 1965.

AMS/A4B
LABZOVSKIY, N.A.

1.2 75
Labzovskii, N. A., K voprosu ob opredelenii ugla otkloneniia vetra v prizemnoi sloye
vozdukh ot ispolivaniia gradienta. [Determination of the angle of deviation of the wind
from the direction of the gradient in the atmospheric layer near the ground.] *Problemy
Arktiki*, No. 2:108-114, 1964. 4 figs., 3 tables, 4 equations. DGS-- A study of data pertaining
to the deviation of the wind from the direction of the isark gradient in the Kara Sea shows that
the angle of deviation does not depend on the velocity of the wind, but rather on the density
of the air, the value of the coefficient of friction between the air and the underlying surface of
the Kara Sea does not vary from winter to summer. The author limits his findings to the
investigated area. An application of the established relations to other regions requires additional
survey. Subject Headings: 1. Gradient winds 2. Micrometeorology 3. Kara Sea,
Soviet Arctic. C K

LABZOVSKIY, N.A.

SOV/124-58-4-4156

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 67 (USSR)

AUTHOR: Labzovskiy, N. A.

TITLE: Calculation of the Wave Elements in Shallow Water (Raschet elementov voln na melkovod'ye)

PERIODICAL: V sb.: Probl. regulirovaniya rechn. stoka. Nr 6. Moscow, AN SSSR, 1956, pp 278-296

ABSTRACT: The author gives empirical formulae for the calculation of wave elements in shoal water based on the values of these elements in deep water. According to his formula, the length of a wave in shoal water is arrived at by multiplying the length of a deep-water wave by an empirical coefficient dependent upon the ratio of the depth at the given location to the length of the deep-water wave. The height of the wave is found in a similar manner, except that the multiplier used for the conversion from height in deep water to height in shoal water depends also upon the ratio of the depth to the length of the shallow-water wave. The author further gives a table and nomogram for finding the elements of deep-sea waves dependent upon the wind velocity and the length of the fetch. Results

Card 1/2

Calculation of the Wave Elements in Shallow Water

SOV/124-58-4-4156

are given of a comparison between wave heights calculated in accordance with the formulae offered and data obtained from factual observations of wave lengths in deep and shallow lake water. The formulae do not take into consideration the probability of the calculated elements. At the same time, determination of the probability characteristics of wave elements, in the author's opinion, should depend upon the time interval during which the process is studied. In addition to the study of the characteristics of surface waviness as related to short intervals of time, the author points to the importance of a study of the statistical characteristics over a period of many years.

1. Water waves--Mathematical analysis

Yu. M. Krylov

Card 2/2

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
p 114 (USSR) 14-57-7-14900

AUTHOR: Labzovskiy, N. A.

TITLE: Forecasting Nonperiodic Level Fluctuations (O
predskazanii neperiodicheskikh kolebaniy urovnya)

PERIODICAL: Tr. Leningr. gidrometeorol. in-ta, 1956, Nr 4,
pp 56-69

ABSTRACT: The author points out the shortcomings of the method
which uses calculations based on atmospheric pressure
gradients observed at a few selected points to fore-
cast nonperiodic level fluctuations. He examines
the following supplemental conditions influencing
level changes: 1) baric formations along the shore on
which an observation station is located; 2) presence
of a shore current; 3) the action of the synoptic
front, which causes a "frontal" wave; 4) the effect

Card 1/2

SOV/124-57-9-10384

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 9, p 71 (USSR)

AUTHORS: Andreyanov, V.G., Labzovskiy, N.A., Selyuk, Ye. M.

TITLE: On the Application of Probability Curves to the Study of Wind-created Surface Waves (O primenenii krivyykh obespechenosti k izucheniyu vetrovogo volneniya)

PERIODICAL: Tr. Gos. gidrolog. in-ta, 1956, Nr 56 (110), pp 118-122

ABSTRACT: The paper consists of a criticism of the results obtained by B. Kh. Glukhovskiy and Ya. G. Vilinskiy (Meteorologiya i gidrologiya, 1953, Nr 9) during an investigation of the laws of the distribution of the elements of wind-created sea waves. The results of the analysis of 119 wave recordings are adduced, which contradict the conclusion by those authors regarding the existence of a single generalized dimensionless distribution function of the heights of wind-created waves.

Yu. M. Krylov

Card 1/1

LABZOVSKIY, N.A., doktor geograficheskikh nauk

Hydrological calculation of reservoir shore transformation.
Trudy Gidroproekta no.4:319-343 '60. (MIRA 15:2)
(Coast changes)
(Reservoirs)

LABZOVSKIY, N.A.

Hydrological basis for calculating the transformation of reservoir
shores. Trudy Okean.kom. 8:98-103 '61. (MIRA 14:5)

1. Leningradskiy filial Gidroyekta.
(Coast changes) (Reservoirs)

LABZOVSKIY, N.A.

Calculation of wind-caused fluctuations in the level of the eastern
Gulf of Finland. Trudy GOIN no.69:46-56 '62. (MIRA 15:11)
(Finland, Gulf of—Oceanography)

LABZOVSKIY, N.A.

Approximative method of calculating wind-raised levels in the
eastern Gulf of Finland. Trudy GOIN no.74:49-59 '63.

(MIRA 16:7)

(Finland, Gulf of--Hydrology)

LABZOVSKIY, N.A.

Study of wind waves. Okeanologiya 1 no.3:504-509 '61.

(MIRA 16:11)

1. Gosudarstvennyy okeanograficheskiy institut, Leningradskoye
otdeleniye.

VOL'TSINGER, N.Ye.; LABZOVSKIY, N.A.; PYASKOVSKIY, R.V.

Numerical calculation of rises of sea level at Leningrad. Trudy
GOIN no.81:14-36 '64. (MIRA 17:11)

ACC NR: AT6006578

(N)

SOURCE CODE: UR/2546/65/000/142/0081/0085

AUTHOR: Labzovskiy, N. A.

ORG: none

TITLE: Calculation of nonperiodic level fluctuations in the Neva River estuary

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy, no. 142, 1965. Morskiye prognozy i raschety (Marine forecasts and calculations); materialy Vsesoyuznogo soveshchaniya, noyabr' 1963 g., 81-85

TOPIC TAGS: ocean dynamics, weather forecasting

ABSTRACT: Methods used in forecasting sea and river surges and in the Neva River in particular are described. Factors in surge prediction include hydrodynamic elements, and the construction of a mathematical model. The study shows that models based on "shallow water" equations are applicable in calculating levels in the Leningrad area. Orig. art. has: 2 figures.

SUB CODE: 0804/ SUBM DATE: none

Card 1/1

LABZYUK, V.I.

First occurrence of the thrush *Microscelis amaurotis* Temm.
in the southern Maritime Territory. Ornithologia no.6:474
'63. (MIRA 17:6)

LAC, J.

LAC, J. Occurrence of the frog *Rana arvalis volterstorffii* Fejervary in Slovakia.
p.102.

Vol. 11, no. 2, 1956, BIOLOGIA, BRATISLAVA, CZECHOSLOVAKIA.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10,
Oct. 1956.

LAC, J.

SCIENCE

LAC, J. Contribution to the geographic races of the salamander Triturus
cristatus Laur. in Slovakia and notes on their ecology. p. 724

BIOLOGIA, Vol. 12, no. 10, 1957

Monthly index of East European Accessions (EEAL) IC, Vol. 7, N o. 12, Dec '58

LAC, J

"A contribution to the study of the nutrition of Bombina bombina L."

BIOLOGIA, Bratislava, Czechoslovakia, Vol. 13, no. 11, 1958

Monthly list of East Europe Accessions (EEAI), LC, Vol. 8, No. 6, Sept 59
Unclass

LAC, J.

"Occurrence of the frog Rana dalmatiana Bon. in Slovakia and a note on its bionomy"

Biologia. Bratislava, Czechoslovakia. Vol. 14, no. 2, 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 59, Unclas

LAC, J.

Evaluation of the significance of amphibia from the point of view of the struggle against mosquitoes on the Great Schutt, p. 265

BIOLOGIA. (Slovenska akademia vied) Bratislava, Czechoslovakia, Vol. 14, no. 3, 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

LAC, Jan

Contribution to the systematics, distribution and bionomics of the
water frogs *Rana ridibunda* Pall. and *Rana esculena* L. in Slovakia.
II. Biologia 14 no.12:896-912 '59. (EEAI 9:7)

1. Biologicky ustav Slovenskej akademie vied, Oddelenie zoologie,
Bratislava.
(SLOVAKIA--FROGS)

ERTL, Milan; ERTLOVA, Eva; LAC, Jan; VRANOVSKY, Marian

Bibliographic survey of the hydrofauna of the Czechoslovak section
of the Danube during the year 1918-1958. In German. Biologia 16
no.1:57-73 '61. (KEAI 10:7)

1. Biologisches Institut der Slowakischen Akademie der Wissenschaften,
Abteilung der Zoologie, Bratislava.
(DANUBE RIVER) (CZECHOSLOVAKIA--FRESH-WATER FAUNA)

LAC, Jan; ERTL, Milan

Extermination of the fish population in a dead arm of the Danube River by means of an emulsion of DDT. Biologia 16 no.2:103-109 '61. (EEAI 10:8)

1. Biologicky ustav Slovenskej akademie vied, Oddelenie zoologie, Bratislava.

(CZECHOSLOVAKIA—FISHES)

(TRICHLOROBISCHLOROPHENYLETHANE)

LACA, V.

"Scientific papers of the Forestry Research Institute in Banska
Stiavnica". Reviewed by V.Laca. Les cas 9 no.4:823-324 '62.

LACAN M.

Penicillike nitrozo compounds. III. Synthesis of α -phenyl- α , β -dioxopropionanilide. ² ~~1.~~ ² ~~2.~~ ² ~~3.~~ ² ~~4.~~ ² ~~5.~~ ² ~~6.~~ ² ~~7.~~ ² ~~8.~~ ² ~~9.~~ ² ~~10.~~ ² ~~11.~~ ² ~~12.~~ ² ~~13.~~ ² ~~14.~~ ² ~~15.~~ ² ~~16.~~ ² ~~17.~~ ² ~~18.~~ ² ~~19.~~ ² ~~20.~~ ² ~~21.~~ ² ~~22.~~ ² ~~23.~~ ² ~~24.~~ ² ~~25.~~ ² ~~26.~~ ² ~~27.~~ ² ~~28.~~ ² ~~29.~~ ² ~~30.~~ ² ~~31.~~ ² ~~32.~~ ² ~~33.~~ ² ~~34.~~ ² ~~35.~~ ² ~~36.~~ ² ~~37.~~ ² ~~38.~~ ² ~~39.~~ ² ~~40.~~ ² ~~41.~~ ² ~~42.~~ ² ~~43.~~ ² ~~44.~~ ² ~~45.~~ ² ~~46.~~ ² ~~47.~~ ² ~~48.~~ ² ~~49.~~ ² ~~50.~~ ² ~~51.~~ ² ~~52.~~ ² ~~53.~~ ² ~~54.~~ ² ~~55.~~ ² ~~56.~~ ² ~~57.~~ ² ~~58.~~ ² ~~59.~~ ² ~~60.~~ ² ~~61.~~ ² ~~62.~~ ² ~~63.~~ ² ~~64.~~ ² ~~65.~~ ² ~~66.~~ ² ~~67.~~ ² ~~68.~~ ² ~~69.~~ ² ~~70.~~ ² ~~71.~~ ² ~~72.~~ ² ~~73.~~ ² ~~74.~~ ² ~~75.~~ ² ~~76.~~ ² ~~77.~~ ² ~~78.~~ ² ~~79.~~ ² ~~80.~~ ² ~~81.~~ ² ~~82.~~ ² ~~83.~~ ² ~~84.~~ ² ~~85.~~ ² ~~86.~~ ² ~~87.~~ ² ~~88.~~ ² ~~89.~~ ² ~~90.~~ ² ~~91.~~ ² ~~92.~~ ² ~~93.~~ ² ~~94.~~ ² ~~95.~~ ² ~~96.~~ ² ~~97.~~ ² ~~98.~~ ² ~~99.~~ ² ~~100.~~ ² ~~101.~~ ² ~~102.~~ ² ~~103.~~ ² ~~104.~~ ² ~~105.~~ ² ~~106.~~ ² ~~107.~~ ² ~~108.~~ ² ~~109.~~ ² ~~110.~~ ² ~~111.~~ ² ~~112.~~ ² ~~113.~~ ² ~~114.~~ ² ~~115.~~ ² ~~116.~~ ² ~~117.~~ ² ~~118.~~ ² ~~119.~~ ² ~~120.~~ ² ~~121.~~ ² ~~122.~~ ² ~~123.~~ ² ~~124.~~ ² ~~125.~~ ² ~~126.~~ ² ~~127.~~ ² ~~128.~~ ² ~~129.~~ ² ~~130.~~ ² ~~131.~~ ² ~~132.~~ ² ~~133.~~ ² ~~134.~~ ² ~~135.~~ ² ~~136.~~ ² ~~137.~~ ² ~~138.~~ ² ~~139.~~ ² ~~140.~~ ² ~~141.~~ ² ~~142.~~ ² ~~143.~~ ² ~~144.~~ ² ~~145.~~ ² ~~146.~~ ² ~~147.~~ ² ~~148.~~ ² ~~149.~~ ² ~~150.~~ ² ~~151.~~ ² ~~152.~~ ² ~~153.~~ ² ~~154.~~ ² ~~155.~~ ² ~~156.~~ ² ~~157.~~ ² ~~158.~~ ² ~~159.~~ ² ~~160.~~ ² ~~161.~~ ² ~~162.~~ ² ~~163.~~ ² ~~164.~~ ² ~~165.~~ ² ~~166.~~ ² ~~167.~~ ² ~~168.~~ ² ~~169.~~ ² ~~170.~~ ² ~~171.~~ ² ~~172.~~ ² ~~173.~~ ² ~~174.~~ ² ~~175.~~ ² ~~176.~~ ² ~~177.~~ ² ~~178.~~ ² ~~179.~~ ² ~~180.~~ ² ~~181.~~ ² ~~182.~~ ² ~~183.~~ ² ~~184.~~ ² ~~185.~~ ² ~~186.~~ ² ~~187.~~ ² ~~188.~~ ² ~~189.~~ ² ~~190.~~ ² ~~191.~~ ² ~~192.~~ ² ~~193.~~ ² ~~194.~~ ² ~~195.~~ ² ~~196.~~ ² ~~197.~~ ² ~~198.~~ ² ~~199.~~ ² ~~200.~~ ² ~~201.~~ ² ~~202.~~ ² ~~203.~~ ² ~~204.~~ ² ~~205.~~ ² ~~206.~~ ² ~~207.~~ ² ~~208.~~ ² ~~209.~~ ² ~~210.~~ ² ~~211.~~ ² ~~212.~~ ² ~~213.~~ ² ~~214.~~ ² ~~215.~~ ² ~~216.~~ ² ~~217.~~ ² ~~218.~~ ² ~~219.~~ ² ~~220.~~ ² ~~221.~~ ² ~~222.~~ ² ~~223.~~ ² ~~224.~~ ² ~~225.~~ ² ~~226.~~ ² ~~227.~~ ² ~~228.~~ ² ~~229.~~ ² ~~230.~~ ² ~~231.~~ ² ~~232.~~ ² ~~233.~~ ² ~~234.~~ ² ~~235.~~ ² ~~236.~~ ² ~~237.~~ ² ~~238.~~ ² ~~239.~~ ² ~~240.~~ ² ~~241.~~ ² ~~242.~~ ² ~~243.~~ ² ~~244.~~ ² ~~245.~~ ² ~~246.~~ ² ~~247.~~ ² ~~248.~~ ² ~~249.~~ ² ~~250.~~ ² ~~251.~~ ² ~~252.~~ ² ~~253.~~ ² ~~254.~~ ² ~~255.~~ ² ~~256.~~ ² ~~257.~~ ² ~~258.~~ ² ~~259.~~ ² ~~260.~~ ² ~~261.~~ ² ~~262.~~ ² ~~263.~~ ² ~~264.~~ ² ~~265.~~ ² ~~266.~~ ² ~~267.~~ ² ~~268.~~ ² ~~269.~~ ² ~~270.~~ ² ~~271.~~ ² ~~272.~~ ² ~~273.~~ ² ~~274.~~ ² ~~275.~~ ² ~~276.~~ ² ~~277.~~ ² ~~278.~~ ² ~~279.~~ ² ~~280.~~ ² ~~281.~~ ² ~~282.~~ ² ~~283.~~ ² ~~284.~~ ² ~~285.~~ ² ~~286.~~ ² ~~287.~~ ² ~~288.~~ ² ~~289.~~ ² ~~290.~~ ² ~~291.~~ ² ~~292.~~ ² ~~293.~~ ² ~~294.~~ ² ~~295.~~ ² ~~296.~~ ² ~~297.~~ ² ~~298.~~ ² ~~299.~~ ² ~~300.~~ ² ~~301.~~ ² ~~302.~~ ² ~~303.~~ ² ~~304.~~ ² ~~305.~~ ² ~~306.~~ ² ~~307.~~ ² ~~308.~~ ² ~~309.~~ ² ~~310.~~ ² ~~311.~~ ² ~~312.~~ ² ~~313.~~ ² ~~314.~~ ² ~~315.~~ ² ~~316.~~ ² ~~317.~~ ² ~~318.~~ ² ~~319.~~ ² ~~320.~~ ² ~~321.~~ ² ~~322.~~ ² ~~323.~~ ² ~~324.~~ ² ~~325.~~ ² ~~326.~~ ² ~~327.~~ ² ~~328.~~ ² ~~329.~~ ² ~~330.~~ ² ~~331.~~ ² ~~332.~~ ² ~~333.~~ ² ~~334.~~ ² ~~335.~~ ² ~~336.~~ ² ~~337.~~ ² ~~338.~~ ² ~~339.~~ ² ~~340.~~ ² ~~341.~~ ² ~~342.~~ ² ~~343.~~ ² ~~344.~~ ² ~~345.~~ ² ~~346.~~ ² ~~347.~~ ² ~~348.~~ ² ~~349.~~ ² ~~350.~~ ² ~~351.~~ ² ~~352.~~ ² ~~353.~~ ² ~~354.~~ ² ~~355.~~ ² ~~356.~~ ² ~~357.~~ ² ~~358.~~ ² ~~359.~~ ² ~~360.~~ ² ~~361.~~ ² ~~362.~~ ² ~~363.~~ ² ~~364.~~ ² ~~365.~~ ² ~~366.~~ ² ~~367.~~ ² ~~368.~~ ² ~~369.~~ ² ~~370.~~ ² ~~371.~~ ² ~~372.~~ ² ~~373.~~ ² ~~374.~~ ² ~~375.~~ ² ~~376.~~ ² ~~377.~~ ² ~~378.~~ ² ~~379.~~ ² ~~380.~~ ² ~~381.~~ ² ~~382.~~ ² ~~383.~~ ² ~~384.~~ ² ~~385.~~ ² ~~386.~~ ² ~~387.~~ ² ~~388.~~ ² ~~389.~~ ² ~~390.~~ ² ~~391.~~ ² ~~392.~~ ² ~~393.~~ ² ~~394.~~ ² ~~395.~~ ² ~~396.~~ ² ~~397.~~ ² ~~398.~~ ² ~~399.~~ ² ~~400.~~ ² ~~401.~~ ² ~~402.~~ ² ~~403.~~ ² ~~404.~~ ² ~~405.~~ ² ~~406.~~ ² ~~407.~~ ² ~~408.~~ ² ~~409.~~ ² ~~410.~~ ² ~~411.~~ ² ~~412.~~ ² ~~413.~~ ² ~~414.~~ ² ~~415.~~ ² ~~416.~~ ² ~~417.~~ ² ~~418.~~ ² ~~419.~~ ² ~~420.~~ ² ~~421.~~ ² ~~422.~~ ² ~~423.~~ ² ~~424.~~ ² ~~425.~~ ² ~~426.~~ ² ~~427.~~ ² ~~428.~~ ² ~~429.~~ ² ~~430.~~ ² ~~431.~~ ² ~~432.~~ ² ~~433.~~ ² ~~434.~~ ² ~~435.~~ ² ~~436.~~ ² ~~437.~~ ² ~~438.~~ ² ~~439.~~ ² ~~440.~~ ² ~~441.~~ ² ~~442.~~ ² ~~443.~~ ² ~~444.~~ ² ~~445.~~ ² ~~446.~~ ² ~~447.~~ ² ~~448.~~ ² ~~449.~~ ² ~~450.~~ ² ~~451.~~ ² ~~452.~~ ² ~~453.~~ ² ~~454.~~ ² ~~455.~~ ² ~~456.~~ ² ~~457.~~ ² ~~458.~~ ² ~~459.~~ ² ~~460.~~ ² ~~461.~~ ² ~~462.~~ ² ~~463.~~ ² ~~464.~~ ² ~~465.~~ ² ~~466.~~ ² ~~467.~~ ² ~~468.~~ ² ~~469.~~ ² ~~470.~~ ² ~~471.~~ ² ~~472.~~ ² ~~473.~~ ² ~~474.~~ ² ~~475.~~ ² ~~476.~~ ² ~~477.~~ ² ~~478.~~ ² ~~479.~~ ² ~~480.~~ ² ~~481.~~ ² ~~482.~~ ² ~~483.~~ ² ~~484.~~ ² ~~485.~~ ² ~~486.~~ ² ~~487.~~ ² ~~488.~~ ² ~~489.~~ ² ~~490.~~ ² ~~491.~~ ² ~~492.~~ ² ~~493.~~ ² ~~494.~~ ² ~~495.~~ ² ~~496.~~ ² ~~497.~~ ² ~~498.~~ ² ~~499.~~ ² ~~500.~~ ² ~~501.~~ ² ~~502.~~ ² ~~503.~~ ² ~~504.~~ ² ~~505.~~ ² ~~506.~~ ² ~~507.~~ ² ~~508.~~ ² ~~509.~~ ² ~~510.~~ ² ~~511.~~ ² ~~512.~~ ² ~~513.~~ ² ~~514.~~ ² ~~515.~~ ² ~~516.~~ ² ~~517.~~ ² ~~518.~~ ² ~~519.~~ ² ~~520.~~ ² ~~521.~~ ² ~~522.~~ ² ~~523.~~ ² ~~524.~~ ² ~~525.~~ ² ~~526.~~ ² ~~527.~~ ² ~~528.~~ ² ~~529.~~ ² ~~530.~~ ² ~~531.~~ ² ~~532.~~ ² ~~533.~~ ² ~~534.~~ ² ~~535.~~ ² ~~536.~~ ² ~~537.~~ ² ~~538.~~ ² ~~539.~~ ² ~~540.~~ ² ~~541.~~ ² ~~542.~~ ² ~~543.~~ ² ~~544.~~ ² ~~545.~~ ² ~~546.~~ ² ~~547.~~ ² ~~548.~~ ² ~~549.~~ ² ~~550.~~ ² ~~551.~~ ² ~~552.~~ ² ~~553.~~ ² ~~554.~~ ² ~~555.~~ ² ~~556.~~ ² ~~557.~~ ² ~~558.~~ ² ~~559.~~ ² ~~560.~~ ² ~~561.~~ ² ~~562.~~ ² ~~563.~~ ² ~~564.~~ ² ~~565.~~ ² ~~566.~~ ² ~~567.~~ ² ~~568.~~ ² ~~569.~~ ² ~~570.~~ ² ~~571.~~ ² ~~572.~~ ² ~~573.~~ ² ~~574.~~ ² ~~575.~~ ² ~~576.~~ ² ~~577.~~ ² ~~578.~~ ² ~~579.~~ ² ~~580.~~ ² ~~581.~~ ² ~~582.~~ ² ~~583.~~ ² ~~584.~~ ² ~~585.~~ ² ~~586.~~ ² ~~587.~~ ² ~~588.~~ ² ~~589.~~ ² ~~590.~~ ² ~~591.~~ ² ~~592.~~ ² ~~593.~~ ² ~~594.~~ ² ~~595.~~ ² ~~596.~~ ² ~~597.~~ ² ~~598.~~ ² ~~599.~~ ² ~~600.~~ ² ~~601.~~ ² ~~602.~~ ² ~~603.~~ ² ~~604.~~ ² ~~605.~~ ² ~~606.~~ ² ~~607.~~ ² ~~608.~~ ² ~~609.~~ ² ~~610.~~ ² ~~611.~~ ² ~~612.~~ ² ~~613.~~ ² ~~614.~~ ² ~~615.~~ ² ~~616.~~ ² ~~617.~~ ² ~~618.~~ ² ~~619.~~ ² ~~620.~~ ² ~~621.~~ ² ~~622.~~ ² ~~623.~~ ² ~~624.~~ ² ~~625.~~ ² ~~626.~~ ² ~~627.~~ ² ~~628.~~ ² ~~629.~~ ² ~~630.~~ ² ~~631.~~ ² ~~632.~~ ² ~~633.~~ ² ~~634.~~ ² ~~635.~~ ² ~~636.~~ ² ~~637.~~ ² ~~638.~~ ² ~~639.~~ ² ~~640.~~ ² ~~641.~~ ² ~~642.~~ ² ~~643.~~ ² ~~644.~~ ² ~~645.~~ ² ~~646.~~ ² ~~647.~~ ² ~~648.~~ ² ~~649.~~ ² ~~650.~~ ² ~~651.~~ ² ~~652.~~ ² ~~653.~~ ² ~~654.~~ ² ~~655.~~ ² ~~656.~~ ² ~~657.~~ ² ~~658.~~ ² ~~659.~~ ² ~~660.~~ ² ~~661.~~ ² ~~662.~~ ² ~~663.~~ ² ~~664.~~ ² ~~665.~~ ² ~~666.~~ ² ~~667.~~ ² ~~668.~~ ² ~~669.~~ ² ~~670.~~ ² ~~671.~~ ² ~~672.~~ ² ~~673.~~ ² ~~674.~~ ² ~~675.~~ ² ~~676.~~ ² ~~677.~~ ² ~~678.~~ ² ~~679.~~ ² ~~680.~~ ² ~~681.~~ ² ~~682.~~ ² ~~683.~~ ² ~~684.~~ ² ~~685.~~ ² ~~686.~~ ² ~~687.~~ ² ~~688.~~ ² ~~689.~~ ² ~~690.~~ ² ~~691.~~ ² ~~692.~~ ² ~~693.~~ ² ~~694.~~ ² ~~695.~~ ² ~~696.~~ ² ~~697.~~ ² ~~698.~~ ² ~~699.~~ ² ~~700.~~ ² ~~701.~~ ² ~~702.~~ ² ~~703.~~ ² ~~704.~~ ² ~~705.~~ ² ~~706.~~ ² ~~707.~~ ² ~~708.~~ ² ~~709.~~ ² ~~710.~~ ² ~~711.~~ ² ~~712.~~ ² ~~713.~~ ² ~~714.~~ ² ~~715.~~ ² ~~716.~~ ² ~~717.~~ ² ~~718.~~ ² ~~719.~~ ² ~~720.~~ ² ~~721.~~ ² ~~722.~~ ² ~~723.~~ ² ~~724.~~ ² ~~725.~~ ² ~~726.~~ ² ~~727.~~ ² ~~728.~~ ² ~~729.~~ ² ~~730.~~ ² ~~731.~~ ² ~~732.~~ ² ~~733.~~ ² ~~734.~~ ² ~~735.~~ ² ~~736.~~ ² ~~737.~~ ² ~~738.~~ ² ~~739.~~ ² ~~740.~~ ² ~~741.~~ ² ~~742.~~ ² ~~743.~~ ² ~~744.~~ ² ~~745.~~ ² ~~746.~~ ² ~~747.~~ ² ~~748.~~ ² ~~749.~~ ² ~~750.~~ ² ~~751.~~ ² ~~752.~~ ² ~~753.~~ ² ~~754.~~ ² ~~755.~~ ² ~~756.~~ ² ~~757.~~ ² ~~758.~~ ² ~~759.~~ ² ~~760.~~ ² ~~761.~~ ² ~~762.~~ ² ~~763.~~ ² ~~764.~~ ² ~~765.~~ ² ~~766.~~

S/001/62/000/005/048/112
B151/B101

AUTHORS: Laćan, M., Marković, Tihomil, Cubranić, A.

TITLE: Curves of corrosive flow - pH of medium for lead submerged
in organic acids

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 361, abstract
5I208 (Glasnik Khem. drushtva, v. 23-24, nos. 7-10, 1958-1959,
401-408)

TEXT: The mechanism of Pb corrosion in several organic acids is studied.
The rate of Pb corrosion in HCOOH at low concentrations is determined by the
diffusion processes. The kinetics of Pb corrosion in COOH-COOH is
determined by the solubility of $Pb(COO)_2$ formed on the surface of the
object. The rate of Pb corrosion in CH_3COOH at pH 2.5 with a constant rate
of O_2 feed is at first accelerated and then falls as a result of the
passivation of the Pb surface. [Abstracter's note: Complete translation.] ✓

Card 1/1

LACAN, Marijan, prof. dr inz.

Greeting address of Prof. Marijan Lacan. Nafta Jug 13
no. 11/12: 279 N-D '62.

LACAN, M.; KUCAN, B.

A note on the synthesis of 2, 7-dibenzoyl-4,5-benzotropone.
Groat chem acta 35 no.2:141-142 '63.

1. Laboratory of Organic Chemistry and Technology, Faculty
of Technology, University of Zagreb, Zagreb, Croatia, Yugoslavia.

LACAN, Marijan, prof. dr inz.; MATASOVIC, Danko, inz.

Some recent developments in the field of the biosynthesis and structural determination of lignin. Kem ind 12 no.4:221-230
Ap '63.

1. Tehnoloski fakultet, Zagreb. 2. Clan Redakcionog odbora,
"Kemija u industriji" (for Lacan).

LACAN, Marijan, prof. dr inz.; MATASOVIC, Danke, inz.

Chemical processing of lignin raw materials; its products and methods of work. Kem ind 12 no.5:311-322 My '63.

1. Tehnoloski fakultet, Zagreb. 2. Clan Redakcionog odbora, "Kemija u industriji" (for Lacan).

LAGAN, Marijan, prof., dr inz.; MATASOVIC, Danko, inz.

Nitrobenzene oxidation of *Quercus robur* and *Castanea sativa*
in an alkaline medium. Pt.1. Kem in 12 no.10:727-746 0'63.

1. Tehnoloski fakultet, Zagreb. 2. Clan Redakcionog odbora,
"Kemija u industriji" (for Lagan).

LACAN, Marijan, prof. dr inz.; MATASOVIC, Danko, dipl. inz.

Preparation and purification of insoluble calcium lignosulfonates
from the sulfite liquor of the Zagreb Paper Mill. Kem ind 13
no. 8:577-590 Ag '64.

1. Faculty of Technology, Zagreb.

LACAN, Marijan, prof. dr inz.; MATASOVIC, Danko, dipl. inz.; PANTLIK, Vlasta,
dipl. inz.; DEZELIC-SUFLAJ, Lidiija, dipl. inz.

Preparation of water soluble sodium, ammonium and magnesium
lignosulfonates. Kem ind 13 no.12:977-995 D '64.

1. Faculty of Technology of the University of Zagreb, Zagreb.

L 49206-65 EPA(s)-2/ENP(r)/T/ENP(t)/ENP(k)/ENP(b)/ENA(c) PF-4 JD/HM
 HI/0018/64/000/008/0436/0442

ACCESSION NR: AP5015377

AUTHOR: Iacatus, Vasile; Costin, Gheorghe; Folteanu, Sorin

TITLE: Utilization and welding of carbon steels and poorly alloyed steels

SOURCE: Constructia de masini, no. 8, 1964, 436-442

TOPIC TAGS: carbon steel, alloy steel, metal welding

Abstract: A summary of the characteristics and proper processing techniques for the principal types of carbon steels and poorly alloyed steels currently used in Rumanian shipbuilding, with emphasis on the methodology of welding. The various types of rods, flux and electrodes for welding are described, and the selection of the most appropriate method is discussed. Orig. art. has 3 figures, 3 graphs, and 8 tables.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: PM

JPRS

Card 1/1 ✓

RUMANIA

576.8.073.4:612.398.145.1

PORTOCALA, R., POPA, I., MORFEI, Ana, LACATUS, V., and POPESCU, M., of the Institute of Inframicrobiology (Institutul de Inframicrobiologie) of the Academy of the Socialist Republic of Rumania (al Academiei Republicii Socialiste Romania).

"Spectrophotometric and Chromatographic Column Analysis of Ribonucleic Acid Extracted from a Suspension of the Brain of Mice Infected with MM Virus Subjected to the Action of Heat."

Bucharest, Studii si Cercetari de Inframicrobiologie, Vol 17, No 2, 66, pp 117-124.

Abstract: The authors found that heating to 75 degrees centigrade for periods ranging from 5 to 220 minutes did not cause a suspension of infected mouse brain to lose its infectivity, indicating that viral ribonucleic acid does not seem to be affected by heat treatment at this temperature. However, the highly polymerized tissue molecules showed significant changes in chromatographic properties within the first 5 minutes of heating.

Includes one table, 3 figures and 9 references, of which one Western and 8 Rumanian. -- Manuscript submitted 29 October 1965.

1/1

- 43 -

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928410011-5"

CHERILAC, Mireasa; LACATUSU, Alecsie

Contributions to the knowledge of the green schists in the southern part of Central Dobruja. Studii cerc geol geogr 9 no.2: 277-294 '64.

1. Geologic Committee attached to the Rumanian Council of Ministers. Submitted June 26, 1964.

IACATUSU, M., lector (Bucuresti); BOLDOR, St., asistent (Bucuresti); DRAGHICI,
I., lector (Bucuresti)

Origin of life on the earth. Natura Biologie 14 no.3:9-16 My-Je '62.

LACATUSU, Matilda

New species of Hymenoptera-Braconidae in the Romanian fauna.
Studia cerc biol anim 15 no.2:237-246 '63.

1. Comunicare prezentata de M.A. Ionescu.

LACATUSU, Matilda

New contributions to the study of Braconidae in Rumania. Studii cerc
biol anim 15 no.1:123-126 '63.

LACATUSU, Matilda

New contributions to the study of the genital armature of the
Braconidae (Hymenoptera) males. Studii cerc biol s. zool 17 no.
1:23-28 '65.

1. Laboratory of Entomology, Faculty of Biology. Submitted
October 8, 1964.

COSTICA, Alexandru, ing.; BUMBARU, Severin, ing.; LACATUSU, Vasile, ing.

Utilization of semirapid engines for ship propulsion. Rev
transport 10 no. 8: 370-382 Ag '63.

LACFALVI, Jozsef, foeloado

Development and situation of foundries. Stat szemle 41 no.3:
259-271 Mr '63.

1. Kozponti Statisztikai Hivatal.

LACFALVI, Jozsef

Characteristic data on foundries in the past years. Koh lap
96 no.12:Suppl.:Ontode 14 no.12:273-279 D '63.

1. Kosponti Statisztikai Hivatal.

LACH, A.

"Total Value of Production as an Independent Element in Planning." p. 313
(CHEMIK. Vol. 7, No. 11, Nov. 1954; Katowice, Poland.)

So: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4,
April 1955, Uncl..

LACH, A.

Boruta, a plant of the dye industry. p. 332. (PRZEMYSŁ CHEMICZNY, Vol. 10, No. 7, July 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

LACH, A.

The dye industry before the Five-Year Plan. p. 210. CHEMIK.
Vol. 8, no. 7/8, July/Aug. 1955. Katowice.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

LACH, A.

After the 1st Conference on Dyeing. p. 284. CHEMIK. Katowice.
Vol. 8, no. 10, Oct. 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956